1. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(-4, 2) \text{ and } (-9, -2)$$

A. $m \in [0.02, 1.65] \quad b \in [5.8, 6.08]$

B. $m \in [-1.11, 0.12] \quad b \in [-9.6, -8.37]$

C. $m \in [0.02, 1.65] \quad b \in [6.76, 7.15]$

D. $m \in [0.02, 1.65] \quad b \in [5.11, 5.34]$

E. $m \in [0.02, 1.65] \quad b \in [-5.6, -4.65]$

2. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x + 9}{6} - \frac{-7x - 7}{3} = \frac{7x + 7}{4}$$

A. $x \in [1.67, 1.93]$

B. $x \in [-1.71, -0.62]$

C. $x \in [-0.54, -0.26]$

D. $x \in [-6.82, -5.13]$

E. There are no real solutions.

3. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.
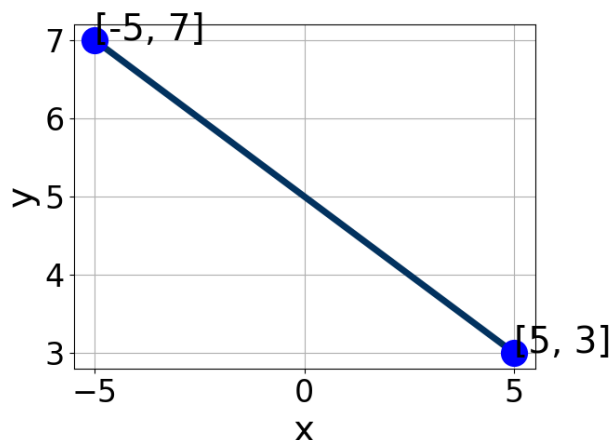
A. $A \in [-0.6, 1.4]$, $B \in [-0.15, 2.2]$, and $C \in [4, 9]$

B. $A \in [2, 9]$, $B \in [4.62, 5.45]$, and $C \in [23, 27]$

C. $A \in [-0.6, 1.4]$, $B \in [-1.03, 0.21]$, and $C \in [-5, -4]$

D. $A \in [2, 9]$, $B \in [-7.61, -3.85]$, and $C \in [-30, -21]$

E. $A \in [-2, -1]$, $B \in [-7.61, -3.85]$, and $C \in [-30, -21]$

---

4. Solve the equation below. Then, choose the interval that contains the solution.

$$-13(-4x - 5) = -18(-19x - 12)$$

A. $x \in [0.85, 1.05]$

B. $x \in [-0.63, -0.31]$

C. $x \in [-1.19, -0.82]$
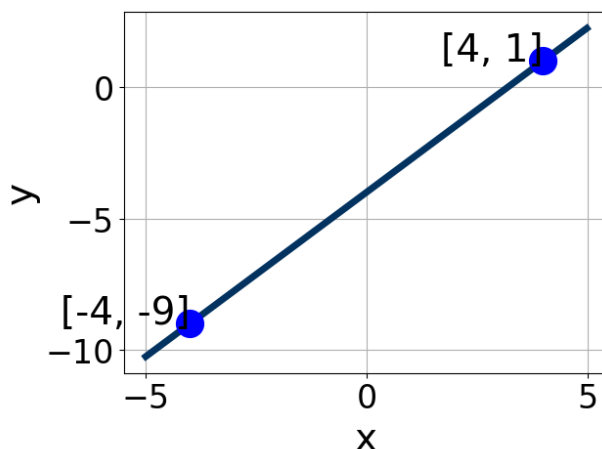
D. $x \in [-0.8, -0.66]$

E. There are no real solutions.

---

5. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $3x - 8y = 15$ and passing through the point $(-3, -9)$.

A. $m \in [-0.75, 0.37]$ $b \in [-10.3, -9.3]$

B. $m \in [0.31, 1.13]$ $b \in [6.6, 10]$

C. $m \in [0.31, 1.13]$ $b \in [-8.7, -7.1]$

D. $m \in [0.31, 1.13]$ $b \in [-6.7, -5.4]$

E. $m \in [1.83, 2.85]$ $b \in [-8.7, -7.1]$

---

6. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.

A. $A \in [2, 9]$, $B \in [2.7, 6.6]$, and $C \in [-17, -15]$

B. $A \in [-8, -4]$, $B \in [2.7, 6.6]$, and $C \in [-17, -15]$

C. $A \in [-4.25, 3.75]$, $B \in [-2.8, 0.8]$, and $C \in [1, 6]$

D. $A \in [-4.25, 3.75]$, $B \in [0.1, 2.1]$, and $C \in [-11, -3]$

E. $A \in [2, 9]$, $B \in [-4.2, -3.2]$, and $C \in [14, 20]$

---

7. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $4x + 9y = 13$ and passing through the point $(5, -4)$.

A. $m \in [-0.18, 0.74]$ $b \in [-6.8, -5.7]$

B. $m \in [-0.5, 0.02]$ $b \in [-1, 4.2]$

C. $m \in [-0.5, 0.02]$ $b \in [-12.1, -8.4]$

D. $m \in [-3.15, -1.79]$ $b \in [-2.1, -0.3]$

E. $m \in [-0.5, 0.02]$ $b \in [-2.1, -0.3]$

---

8. Solve the equation below. Then, choose the interval that contains the solution.

$$-2(-18x - 9) = -19(-16x - 8)$$

A. $x \in [-0.57, -0.33]$

B. $x \in [0.51, 0.65]$

C. $x \in [-0.97, -0.59]$

D. $x \in [-0.57, -0.33]$

E. There are no real solutions.

---

9. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b.

$$(-5, -9) \text{ and } (9, -2)$$

A. $m \in [0.2, 3]$ $b \in [-7, -4.5]$

B. $m \in [-3.7, 0.4]$ $b \in [-1, 3]$

C. $m \in [0.2, 3]$ $b \in [6.1, 6.7]$

D. $m \in [0.2, 3]$ $b \in [-12.8, -9.6]$

E. $m \in [0.2, 3]$ $b \in [-4.6, -3.9]$

---

10. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-5x - 4}{2} - \frac{3x - 8}{8} = \frac{-9x + 8}{4}$$

A. $x \in [-6.3, -4.5]$

B. $x \in [0.6, 3.2]$

C. $x \in [-9.5, -7.8]$

D. $x \in [-7.1, -6.1]$

E. There are no real solutions.

---

11. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(6,6) \text{ and } (9,11)$$

A. $m \in [-7.67, 0.33]$ $b \in [25.8, 29.2]$

B. $m \in [-0.33, 8.67]$ $b \in [3.7, 5.9]$

C. $m \in [-0.33, 8.67]$ $b \in [-1, 1.2]$

D. $m \in [-0.33, 8.67]$ $b \in [-5.2, -2.9]$

E. $m \in [-0.33, 8.67]$ $b \in [1.1, 2.9]$

---

12. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x - 5}{4} - \frac{4x - 7}{3} = \frac{-8x - 9}{8}$$

A. $x \in [3.9, 8.9]$

B. $x \in [-0.32, 4.68]$

C. $x \in [-29.4, -25.4]$

D. $x \in [-8.3, -1.3]$

E. There are no real solutions.

---

13. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.
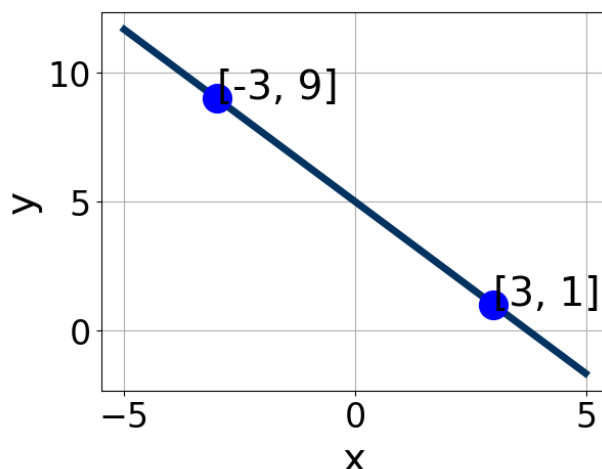
A. $A \in [1.6, 5.3]$, $B \in [-3.06, -2.19]$,   and $C \in [-20, -12]$

B. $A \in [1.6, 5.3]$, $B \in [2.68, 3.08]$,   and $C \in [15, 18]$

C. $A \in [1.1, 3.6]$, $B \in [-1.07, -0.62]$,   and $C \in [-7, 0]$

D. $A \in [-9, -3]$, $B \in [-3.06, -2.19]$,   and $C \in [-20, -12]$

E. $A \in [1.1, 3.6]$, $B \in [0.83, 1.71]$,   and $C \in [1, 13]$

---

14. Solve the equation below. Then, choose the interval that contains the solution.

$$-9(-14x + 11) = -18(7x - 6)$$

A. $x \in [0.03, 0.04]$

B. $x \in [-0.03, 0.01]$

C. $x \in [0.82, 0.83]$
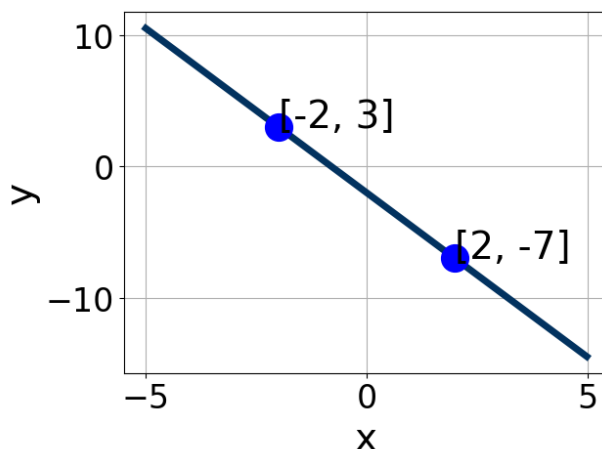
D. $x \in [-0.07, -0.03]$

E. There are no real solutions.

---

15. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Perpendicular to $7x - 4y = 15$ and passing through the point $(2, -5)$.

A. $m \in [0.08, 1.18]$ $b \in [-6.79, -5.47]$

B. $m \in [-1.15, 0.33] \quad b \in [-7.55, -6.33]$

C. $m \in [-1.15, 0.33] \quad b \in [-4.77, -3.59]$

D. $m \in [-1.78, -1] \quad b \in [-4.77, -3.59]$

E. $m \in [-1.15, 0.33] \quad b \in [3.2, 4.62]$

16. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.

A. $A \in [0.4, 4.1], \quad B \in [0.95, 1.55],$ and $C \in [-2.54, -1.9]$

B. $A \in [-7.1, -3.9], \quad B \in [-2.17, -1.4],$ and $C \in [3.28, 4.82]$

C. $A \in [4.8, 7.2], \quad B \in [1.19, 2.03],$ and $C \in [-5.16, -3.1]$

D. $A \in [4.8, 7.2], \quad B \in [-2.17, -1.4],$ and $C \in [3.28, 4.82]$

E. $A \in [0.4, 4.1], \quad B \in [-1.28, -0.62],$ and $C \in [0.68, 2.36]$

17. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Perpendicular to $5x + 4y = 13$ and passing through the point $(4, 7)$.

A. $m \in [0.68, 1.24] \quad b \in [-3.86, -3.23]$

B. $m \in [0.68, 1.24] \quad b \in [3.48, 4.1]$

C. $m \in [-1.73, -0.68] \quad b \in [10.01, 10.27]$

D. $m \in [0.82, 1.33]$ $b \in [3.48, 4.1]$

E. $m \in [0.68, 1.24]$ $b \in [2.56, 3.07]$

---

18. Solve the equation below. Then, choose the interval that contains the solution.

$$-14(-5x - 19) = -18(-13x - 11)$$

A. $x \in [0.1, 0.7]$

B. $x \in [-2.5, -0.8]$

C. $x \in [1.9, 3]$

D. $x \in [-3.4, -2]$

E. There are no real solutions.

---

19. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(-2, 11) \text{ and } (-7, -2)$$

A. $m \in [1.6, 11.6]$ $b \in [12.6, 15.6]$

B. $m \in [-4.6, 0.4]$ $b \in [-23.9, -16.6]$

C. $m \in [1.6, 11.6]$ $b \in [-16.3, -16.1]$

D. $m \in [1.6, 11.6]$ $b \in [15, 18.1]$

E. $m \in [1.6, 11.6]$ $b \in [3.5, 6]$

---

20. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x - 4}{8} - \frac{-8x + 5}{3} = \frac{8x + 7}{5}$$

A. $x \in [1.8, 5.3]$

B. $x \in [-1.2, 0.6]$

C. $x \in [0.6, 2]$

D. $x \in [9.2, 12.7]$

E. There are no real solutions.

---

21. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b.

$$(-4, -5) \text{ and } (-8, 4)$$

A. $m \in [-5.25, 0.75]$ $b \in [12.7, 14.1]$

B. $m \in [2.25, 6.25]$ $b \in [19.8, 22.7]$

C. $m \in [-5.25, 0.75]$ $b \in [-2.2, 2]$

D. $m \in [-5.25, 0.75]$ $b \in [-17.3, -13.9]$

E. $m \in [-5.25, 0.75]$ $b \in [11.7, 12.2]$

---

22. Solve the linear equation below. Then, choose the interval that contains the solution.
$$\frac{5x - 3}{3} - \frac{9x + 5}{2} = \frac{-3x + 9}{5}$$

A. $x \in [-0.3, 0.3]$

B. $x \in [-4.5, -0.7]$

C. $x \in [-6.6, -4.2]$

D. $x \in [-9.5, -7]$

E. There are no real solutions.

---

23. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.
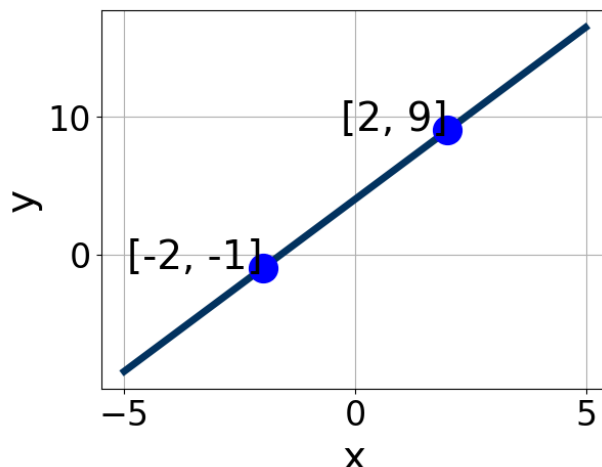
A. $A \in [-2.5, 3.5]$, $B \in [-0.1, 1.48]$, and $C \in [3, 7]$

B. $A \in [-2.5, 3.5]$, $B \in [-1.5, -0.51]$, and $C \in [-5, -3]$

C. $A \in [4, 6]$, $B \in [1.69, 3.53]$, and $C \in [8, 15]$

D. $A \in [4, 6]$, $B \in [-2.2, -1.73]$, and $C \in [-10, -7]$

E. $A \in [-9, -3]$, $B \in [1.69, 3.53]$, and $C \in [8, 15]$

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24. Solve the equation below. Then, choose the interval that contains the solution.

$$-13(5x + 19) = -3(-11x + 15)$$

A. $x \in [1.3, 3.6]$

B. $x \in [-9.8, -7.4]$

C. $x \in [-2.7, -1.6]$
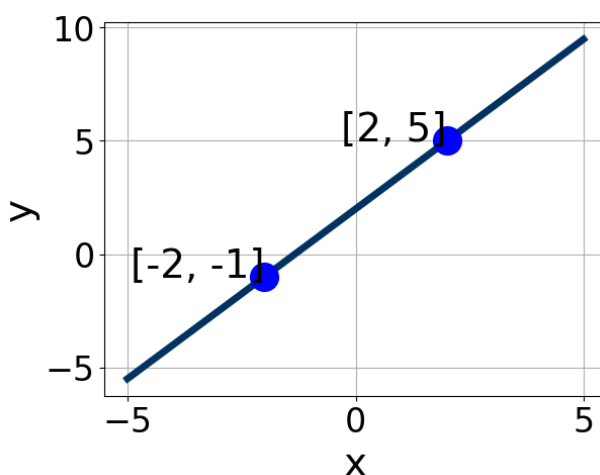
D. $x \in [-3.3, -2.5]$

E. There are no real solutions.

---

25. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $5x - 7y = 14$ and passing through the point $(10, 3)$.

A. $m \in [-1.26, -0.2]$ $b \in [8.8, 10.4]$

B. $m \in [0.07, 1.38]$ $b \in [-8.4, -4.5]$

C. $m \in [0.07, 1.38]$ $b \in [3.2, 6.7]$

D. $m \in [1.02, 1.91]$ $b \in [-4.3, -1.4]$

E. $m \in [0.07, 1.38]$ $b \in [-4.3, -1.4]$

---

26. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.

A. $A \in [-4.5, -2.5]$, $B \in [1.58, 2.76]$, and $C \in [3.79, 5.34]$

B. $A \in [-2.8, 0.7]$, $B \in [0.02, 1.16]$, and $C \in [0.61, 2.29]$

C. $A \in [1, 5.7]$, $B \in [-3.02, -1.46]$, and $C \in [-6.48, -3.39]$

D. $A \in [-2.8, 0.7]$, $B \in [-1.76, -0.98]$, and $C \in [-3.88, -1.87]$

E. $A \in [1, 5.7]$, $B \in [1.58, 2.76]$, and $C \in [3.79, 5.34]$

---

27. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $5x - 7y = 10$ and passing through the point $(3, 2)$.

A. $m \in [1.06, 2.08]$ $b \in [-0.6, 0.04]$

B. $m \in [0.14, 0.72]$ $b \in [-0.6, 0.04]$

C. $m \in [-0.75, -0.33]$ $b \in [4.03, 4.42]$

D. $m \in [0.14, 0.72]$ $b \in [-1, -0.92]$

E. $m \in [0.14, 0.72]$ $b \in [-0.13, 0.34]$

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28. Solve the equation below. Then, choose the interval that contains the solution.
$$-6(18x - 14) = -10(5x + 7)$$

A. $x \in [2.61, 2.82]$

B. $x \in [0.18, 0.34]$

C. $x \in [-0.04, 0.22]$

D. $x \in [-0.6, -0.1]$

E. There are no real solutions.

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29. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(10, 4) \text{ and } (9, -7)$$

A. $m \in [9, 13]$ $b \in [106, 110]$

B. $m \in [9, 13]$ $b \in [-107, -103]$

C. $m \in [9, 13]$ $b \in [-6, -2]$

D. $m \in [-15, -8]$ $b \in [92, 93]$

E. $m \in [9, 13]$ $b \in [-23, -13]$

---

30. Solve the linear equation below. Then, choose the interval that contains the solution.
$$\frac{-4x + 9}{3} - \frac{-3x - 4}{8} = \frac{-5x + 6}{4}$$

A. $x \in [-0.5, 3.5]$

B. $x \in [-8.86, -5.86]$

C. $x \in [-4.43, -1.43]$

D. $x \in [-25, -22]$

E. There are no real solutions.